

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Modern Plastics, Inc.

Puerto Rico Manufacturing Extension Inc

Modern Plastics, Inc. Improves Capacity with 5S

Client Profile:

Modern Plastics, Inc., founded in 1985, specializes in designing and manufacturing custom-made plastic items for local pharmaceutical manufacturers. The company's manufacturing capabilities include cutting, bending, forming, assembly, and polishing to make their finished products. The family-owned business employs 14 people at its facility in Bayamon, Puerto Rico.

Situation:

Modern Plastics' owners wanted to make the company more competitive in the marketplace and increase their production capacity. The company contacted the Puerto Rico Manufacturing Extension Inc (PRiMEX), a NIST MEP network affiliate, for help.

Solution:

PRiMEX brought in Viterra, a third party consultant, to perform a Performance Benchmarking System (PBS) Assessment. A number of areas of improvement were identified. Some of the opportunities were related to improvements in shop layout, work flow, standardization and cleanliness. Accumulation of WIP (work in process), raw material leftovers, non-conforming materials, etc., was taking up valuable floor space and made the shop look cluttered and unsafe. PRiMEX proposed to conduct a 5S (Sort, Set in Order, Shine, Standardize, Sustain) implementation project in the Modern Plastics facilities. The project was started with the assistance of a Performance Consultant from PRiMEX and the participation and commitment of all plant employees. Everyone was formally trained in 5S principles and implementation techniques. Implementation work sessions were scheduled in such a way as to minimize the impact to their production plan. A storage rack was designed and built for material leftovers to visually determine what to keep and how much and the rest is thrown away so that future accumulations are prevented. This process freed up space, and a new and more effective layout was implemented. Machines and material locations were marked on the floor and identified with plastic signs prepared in-house. A 5S bulletin board was displayed with the before-and-after photos and the results of the weekly audits.

Results:

- * Improved productivity by 20 percent.
- * Improved capacity by 60 percent.
- * Increased floor space by 44 percent.
- * Improved employee morale.

Testimonial:

"The shop improvements resulted from the 5S implementation conducted by PRiMEX will allow us to aggressively pursue our business growth objectives. We are now ready to start our growth program

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with PRIMEX's assistance."

Elide Johnson, President